МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

КРЕМЕНЧУЦЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ

ІМЕНІ МИХАЙЛА ОСТРОГРАДСЬКОГО

МЕТОДИЧНІ ВКАЗІВКИ

ЩОДО САМОСТІЙНОЇ РОБОТИ

З НАВЧАЛЬНИХ ДИСЦИПЛІН:

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ЗІ СПЕЦІАЛЬНОСТЕЙ:

122 – «КОМП'ЮТЕРНІ НАУКИ», 123 – «КОМП'ЮТЕРНА ІНЖЕНЕРІЯ»

ЗА ОСВІТНЬО-ПРОФЕСІЙНИМИ ПРОГРАМАМИ:

«КОМП'ЮТЕРНІ НАУКИ», «КОМП'ЮТЕРНА ІНЖЕНЕРІЯ»

ОСВІТНЬОГО СТУПЕНЯ «БАКАЛАВР»

(ЧАСТИНА 1)

КРЕМЕНЧУК 2020

Методичні вказівки щодо самостійної роботи з навчальних дисциплін: «Англійська мова за профспрямуванням», «Англійська мова» для студентів денної форми навчання зі спеціальностей: 122 – «Комп'ютерні науки», 123 – «Комп'ютерна інженерія» за освітньо-професійними програмами «Комп'ютерні науки», «Комп'ютерна інженерія» освітнього ступеня «Бакалавр» (частина 1)

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Голова методичної ради _____ проф. В. В. Костін

ЗМІСТ

ВСТУП

Мета самостійної роботи студентів – отримання додаткових знань, перевірка їх на практиці, вироблення фахових і дослідницьких умінь і навичок.

Зміст самостійної роботи студента з навчальної дисципліни «Англійська мова за професійним спрямуванням» визначається робочою й навчальною програмами дисципліни, методичними матеріалами, завданнями та вказівками викладача.

Мета методичних вказівок – надати студентам допомогу у формуванні іншомовної комунікативної компетентності у сфері професійного спілкування, що обумовлюється метою викладання навчальної дисципліни «Англійська мова за професійним спрямуванням» й основними завданнями вивчення цієї дисципліни, а саме: формування лексичного запасу з окреслених тематичними модулями тем; розвиток уміння висловлювати свою думку як усно, так і в письмовій формі; вести бесіду з професійних тем; презентувати результати своїх розробок; вільно читати, розуміти й обговорювати тексти з визначеної тематики.

Вправи та завдання спрямовані на активізацію лексичного та граматичного матеріалу, розширення словникового запасу за тематикою змістових модулів.

Згідно з вимогами освітньо-професійної програми студенти повинні

знати:

– загальновживані терміни та словосполучення з тем тематичних модулів;

– граматичні ресурси англійської мови;

– правила словотвору;

уміти:

– висловлювати свою думку як усно, так і письмовій формі;

– вести бесіду на теми тематичних модулів;

– вільно читати, розуміти q обговорювати професійні тексти;

– презентувати результати своїх розробок.

1 ТЕМИ ТА ПОГОДИННИЙ РОЗКЛАД ПРАКТИЧНИХ ЗАНЯТЬ І САМОСТІЙНОЇ РОБОТИ З НАВЧАЛЬНОЇ ДИСЦИПЛІНИ

№ пор.	Назва теми	Кількість годин	
		лек	сам
1	Operating System Concept. Present Simple and Present Progressive.	7	21
2	Process Concept. Process Management. Non-progressive Verbs.	7	21
3	Memory Concept. Memory Management. Past Simple and Past Progressive.	8	21
4	I/O Devices. Device Management. Past Simple and Present Perfect.	8	21
5	Computer Network Concept and Architecture. Present Perfect and Past Perfect.	10	28
6	Computer Network Types. Present Perfect Progressive and Past Perfect Progressive.	10	28
7	Computer Networks Topologies and Components. Future Tenses.	10	28
8	Data, Information, Knowledge and Wisdom Concepts. Contable and Uncountable Nouns.	6	17
9	Database Concept & Components. Comparison of Adjectives.	6	17
10	Database Models. Modals.	6	17
11	The Relational Database Model. The Passive.	6	17
12	Database Design. Ing-form as a Noun, After Prepositions.	6	17
13	Web Concepts. Linking Words.	6	17
14	Internet Protocols. Numbers.	6	17

Продовження таблиці

15	Client-Side Web Programming. Measurements.	6	17
16	Server-Side Web Programming. Enabling Words.	6	17
17	Web Page and Web Portal Design. Relative Clauses.	6	17
18	Induction. Conditionals.	6	16
19	Number Theory. Cause-and-Effect Sentences.	6	16
20	Graph Theory. Time Clauses.	6	16
21	Maths in Communication Networks. Obligation and Requirements.	6	16
22	Relations, Sums, Approximations. Causation.	6	16
23	Intelligent Technologies Concepts. Ability and Inability.	6	17
24	Neural Networks Architecture. Word Order: Nouns and Verbs.	6	17
25	Fuzzy System Basics. Word Order: Adverbs	6	17
26	Hybrid Models. Word Order: Adjectives and Past Participles.	6	17
27	Intelligent Technologies Application.	6	17
28	Cloud Computing. Verb Phrases.	10	28
29	Big Data Concept. Comparing and Contrasting.	10	28
30	Artificial Intelligence. Scale of Likelihood.	10	28
	Усього забезпечення аудиторних занять	210	587
	Забезпечення семестрового контролю: диф. залік, екзамен	–	43
	Усього	**210**	**630**

2 ПЕРЕЛІК ТЕМ І ПИТАНЬ З НАВЧАЛЬНОЇ ДИСЦИПЛІНИ ДЛЯ САМОСТІЙНОГО ОПРАЦЮВАННЯ

Тема 1. Operating System Concept. Present Simple and Present Progressive.

Методичні поради

1. Give the correct form of the simple present of each verb.

1. Water .... at 100C. (boil)

2. Hot air .... (rise)

3. My uncle ....in a factory. (work)

4. John and Sue .... glasses. (wear)

5. The children .... a lot of sweets. (eat)

6. He only .... at weekends. (work)

7. I always .... out on Saturdays. (go)

8. She .... to London once a week. (drive)

9. She never .... up very early. (get)

10. I occasionally .... meat. (eat)

11. The coach .... at 6 this evening. (leave)

12. The concert .... at 7 next Friday. (start)

13. I .... Barcelona won again. (see)

14. It's not right, you .... (know) - I .... (agree)

15. Can he manage? - I .... so. (hope)

16. It .... in the paper it'll be hot. (say)

2. Tick the sentences that are right. Cross out the verbs that are wrong and correct them.

1. You're never ill. I envy you.

2. I understand English well.

3. You're knowing what I mean.

4. Is he seeming unfriendly?

5. I prefer fish to meat.

6. Do you see that bird over there?

7. Why is he smelling his coffee?

8. She's weighing herself again.

9. You're never ill. I'm envying you.

10. I'm understanding English well.

11. You know what I mean.

12. Does he seem unfriendly?

13. I'm preferring fish to meat.

14. Are you seeing John tomorrow?

15. Something smells strange.

16. She weighs 75.5 kilos.

3. Put in the simple present or the present progressive tenses.

CHOMP CHAMP!

'(you sit) …………… comfortably? Good! I (hope) .... you (study) .... this text carefully because I (have) .... news for you. The Guinness Book of Records (not include) .... records for eating any more. People who (try) .... to swallow 47 hard-boiled eggs in half a minute will have to do it for pleasure and not to get into the record book. 'We (regard) .... these records as unhealthy,' said the book's editor, Mr Donald McFarlan. However, one record-holder will remain. He is Michel Lotito of Grenoble ('Monsieur Mangetout'). Since 1966, he has chomped his way through 10 bicycles, 7 TV sets and a light aircraft. He's likely to remain world champ, unless you (want) .... to challenge him, of course!

4. Use the present progressive in the sentences below. Number the sentences 1, 2, 3 or 4 to show uses of the present progressive.

1. Don't rush me ....fast as I can. (I / work)

2. What .... ? It looks awful. (you / drink)

3. .... to see the boss. (She / still wait)

4. ....to catch his train. (He / hurry)

5. .... , aren't you? Calm don (You / constantly / panic)

6. .... more and more politically aware these days. (Young people / become)

7. What ....nowadays? (John / do) - .... for the British cycle team. (He / ride)

8. .... our holiday here very much. (We / enjoy)

9. .... people by asking personal questions. (Hela / hays / upset)

10. What time .... tomorrow? (he / arrive)

11. .... to lock the front door. (She / forever / forget)

12. .... treatment on my bad back for a few weeks. (I / have)

13. You can't believe a word he says. .... (He / always / lie)

14. .... the 1,500 metres in the next Olympics. (She / run)

5. Use the correct present tense form.

Let me explain what you have to do. First you (take) .... the photos and (sort) .... them into categories. Then you (file) ………….... them according to subject.

We (hope) .... you (enjoy) .... this marvellous weather as much as we are. We (sunbathe) .... and (go) ....swimming every day. Next week we (go) .... snorkelling.

The play is set in London in 1890. The action (take) .... place in Sir Don Wyatt's mansion. When the curtain (go) .... up, the hero and heroine (sit) .... in the lounge. They (argue) ....

The house is in a mess because we've got the workmen in. The plumber (put) .... in a new bath, the electricians (rewire) .... the

system, and the carpenter (build) .... us some new bookshelves!

Dear Jane,

Sorry to hear about your problem at work I (think) .... you (do) .... the right thing, but I (doubt) .... whether your boss really (know) .... his job from what you (tell) .... me!

Pym (pass) .... to Smith, who (run) .... straight at the central defence and (shoot) .... and Gomez (push) .... it over the bar for a corner.

6. Put in the simple present or present progressive. Note where both forms are possible.

A HOLIDAY JOB WITH A DIFFERENCE!

I (study)………. English at Exeter University. I'm on holiday at the moment and I (work) .... in a public library. I'm lucky to have this job. I (not have to) .... get up early. The library (open) .... at 10 and (close) .... at 7. It's interesting work because people (always come in) .... and (ask).................. me to help them, so I (learn) .... a lot about different subjects. I (enjoy) .... the job and (find)................. it very amusing, too. People (use) " .... the strangest things as bookmarks. I have found a rasher of bacon (uncooked!). Matchsticks (be).................... common and so (be) .... bus tickets. My colleagues (always find) .... things too - even a 10 note, but I haven't been so lucky! I often (think) .... of the photo of a beautiful woman which I found. On the back were the words: 'I (love) .... you. I (miss)..................... you and I'll never forget you.'

Питання для самоперевірки

1. What difference is there between applications software and operating systems?

2. Why is the supervisor program the most important operating system program?

3. What is the difference between resident and non-resident programs?

4. What are the main functions of an operating system?

Література: [2, с. 10–90; 3, с. 40–80].

Тема 2. Process Concept. Process Management. Non-Progressive Verbs.

Методичні поради

1. Complete the text with the negative form of the verbs in brackets.

ROMEO AND JULIET

Two families, the Montagues and Capulets, live inVerona, Italy,but they (get on) …………with each other. Romeo, son of Montague, thinks he is in love with Rosaline, but unfortunately she (love) .... him. He goes to see her at a party at the house of his enemy Capulet, but there he sees Juliet, Capulet's daughter. She (know) ……………. his name because he has a mask. Tybalt, one of the Capulet family, tries to fight with Romeo, but Capulet (allow) …………. this. However, Tybalt (agree) ………….. with him, and (forgive) …………… Romeo for coming to the house. Romeo manages to talk to Juliet, and he kisses her. They (understand) …………. that their families are enemies. When Romeo learns the truth, he (care) ……………. that his love for Juliet could be very dangerous. Later he goes back to the house and stands in the garden. Juliet is standing on the balcony talking to herself about Romeo, but (see) …………… him below in the garden. After he talks to her, they soon show their love for each other, and agree to get married. However, they (realize)………… that a terrible tragedy is about to happen.

2. Complete the text with the affirmative, negative or question form of the verbs in brackets.

What (do) ………… the body .... to protect itself? Your body (prevent) …………. harmful microorganisms entering and causing harm. The skin, for example, (allow) …………… microorganisms to enter. Hairs and mucus in your nose (catch) …………… invaders, and then you (push) ………….. the mucus out when you cough, sneeze or blow your nose. Enzymes and acids in the body, and white blood cells also (destroy) …………….. bacteria. (help) …………. antibiotics? Doctors (use) ………….. antibiotic drugs to fight bacterial infections, but antibiotics (work) …………….. against viruses. This is why doctors (give) …………….. antibiotics to patients with a common cold or flu.

How (work) …………….. immunization? Immunization (or vaccination) is another way of protecting the body, by injecting the body with dead or inactive microorganisms. After vaccination, the body (start) ……………. to make antibodies that destroy the microorganism. Because the microorganisms in the vaccination are not dangerous, the person (get) …………. ill. When they (come) into contact with a live (dangerous) microorganism, then the antibodies (destroy) ……………. the infection before it makes them ill.

3. Complete the text with the present simple or present continuous forms of the verbs in brackets.

Population (mean) …………. the number of people who live in a particular area.

The population of the world (not stay) …………. the same. At the moment it (grow) ………….. at an increasing rate. In fact, scientists (believe) ………….. that the world population will increase until 2200, and then stop growing. However, things are not the same in all parts of the world. At present in many Western industrial countries the population (fall) ………………... This (happen) ……………. because families are small, and health conditions are good. In developing countries, on the other hand, the population (rise) ……….. sharply. In Ghana, for example, most families (have) ……………… several children. Many children in Ghana (die) ………….. from illness, so it is important to have lots of children. They earn money for the family and (look after) ……………. their parents in old age.

4. Complete the sentence with the present simple or present continuous form of the verb in brackets.

5. Everybody (know) …………… that the world's rainforests (disappear).

6. Although rainforests (cover) ……………. only six per cent of the Earth's land surface, they (contain) ………. about 50% of all species of life on the planet.

7. They also (remove) ……………. carbon dioxide (CO_2) from the air and (produce)………… oxygen (O_2).

8. As they are important, why (they / vanish) ………… ?

9. Most scientists (agree) …………. that there are two main reasons.

10. First of all, the way of life in these forests (change) ………….. .

11. In some forests, big companies (cut) ………. down more and more trees (deforestation) and (cause) ………….. damage to the land.

12. In other places, another kind of deforestation (happen) ……………

13. Here farmers (bum) …………. more and more of the forest and (use) ………….. the land to feed cattle.

14. Now that governments (understand) ………. the problem, they (begin) …………… to control these activities.

<div align="center">

Питання для самоперевірки

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1. What is a process?

2. What is a program?

3. What are differencies between a process and program?

Література: [2, с. 111–150; 3, с. 95–140].

Тема 3. Memory Concept. Memory Management. Past Simple and Past Progressive

<div align="center">

Методичні поради

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1. Supply the past forms of the irregular verbs.

2. I often see Giulio. I .... him again only yesterday.

3. As teenagers, we always .... each other very well. We still understand each other now.

4. I hardly .... Ray's wife. Did you know her at all?

5. We always meet on Sunday. We .... last Sunday as usual.

6. I often find things on the beach. I .... this very old bottle yesterday.

7. Someone's always leaving that window open. Who .... it open this time?

8. I .... a lot of letters when I was young. I hardly ever write letters now.

9. They sell all kinds of rubbish now, but they once .... good handmade furniture.

10. She is very good at figures, you know. She ....first in maths at school.

11. I have the same car now that I .... five years ago.

12. I don't keep pets now, but I .... a dog when I was a boy.

13. Where did you eat last night? – We ....at a restaurant.

2. Give complete answers to these questions using the time references in brackets.

How long ago did you work as a civil servant? (five years ago) ……………

When did you last play football? (when I was 14) ....

When did the Carters leave for their summer holiday? (last night) ………………….

What time did John arrive? (at 4) ....

When did you last see 'Gone with the Wind'? (recently) ....

How long did you wait at the airport? (till they arrived) ....

When did Sally tell you about her engagement? (when she was here) ………………

3. Put in the correct forms of the simple past tense of the verbs in brackets.
LIZARDMAN

Christopher Davis, a young driver from South Carolina, (claim) ………… a monster (attack) .... him while he was driving along a lonely road. The monster (be)..................... seven feet tall and (have) .... red eyes and green, scaly skin. It (chase) .... Christopher's car and (jump) .... on the roof. Many people (believe) .... the story and the newspapers (call) .... the monster 'Lizardman'. Seventy hunters recently (set out) .... to trap Lizardman and a local radio (offer)............................ $1 million to anyone who (capture)........................ him dead or alive. Lizardman had so much publicity that thousands of people (visit) .... South Carolina to find him. No one has found him yet. As everyone knows, monsters may or may not exist, but they are very good for the tourist industry!

4. Put in the simple past or past progressive. Note where both forms are possible.

TUG-OF-WAR WITH A HEDGEHOG

Mrs May, our District Nurse, *(drive)* ……….. home at 3 a.m. one night after an urgent visit to a sick patient. She *(drive)* .... along a deserted country lane, when she *(see)*........................ a new kind of animal. She *(stop)* .... her car and *(get out)* .... The animal *(be)* .... clearly visible in the blaze of her headlights. It *(look)* .... like a hedgehog with a tall white hat. It *(cross)* .... the road without paying any attention to Mrs May. When Mrs May *(go)* .... close to it, she *(notice)* .... that there was a plastic yoghurt pot on the hedgehog's head. The poor creature had got its head stuck in the plastic pot! Her instincts as a nurse *(tell)* .... her she would have to rescue it, so she *(pull)* .... at the pot, but the hedgehog *(pull)* .... too. After a struggle, she *(pull)* .... the pot off the hedgehog's head. Mrs May *(think)* .... the hedgehog *(look)* .... rather sad, when she *(notice).* .... that the pot was half full of strawberry yoghurt. She *(give)* .... it back to the hedgehog. The creature *(seize)* .... it, *(put)* .... it on its head again, and triumphantly *(continue)* .... its journey across the road.

5. Complete the sentence with the past simple or past continuous form of the verb in brackets.

Alexander the Great

1. While he (grow up) ………....., the philosopher Aristotle was his teacher. Alexander (become) …………… interested in science, medicine, philosophy and literature.

2. While his father Philip (attend) ………… his daughter's wedding, a young nobleman (murder) …………… him. Alexander was king of Macedonia at the age of 20.

3. While he (fight) ……….. his enemies in the north, the Greeks in the south (start)

15

.... a rebellion. He (destroy) …………. their cities.

4 He (lead) ………….. his army against the Persian Empire through what is now Turkey.

5. While he (stay) …………. in the ancient city of Gordium, he (undo) …………. the Gordian knot. A legend said that only a future king of Asia could do this.

6. While his army (march) ………….. through Persia, it (defeat) …………. Darius, the king of Persia.

7. He (found) …………. the city of Alexandria at the mouth of the Nile while he (visit) …………... Egypt.

8. While he (travel) ………… with his army, he (give) ……………… his name to many other towns.

9. He (kill) …………… his friend Clitus in a quarrel, while they (have) .... dinner.

10. While he (attack) …………... the city of Mali in India, he (receive) …………. a serious wound from an arrow.

11. While he (attend) ………….. a banquet in Babylon in 323 BC, he (fall) ………. Ill and (die) ……… .

6. Complete the sentence with *used* to + a verb from the list.

write spend work hold help act teach set tell do

1. Charles Dickens, the novelist ……………. until early in the morning, and then go for long walks across London.

2. William Shakespeare ……………. in some of his own plays.

3. The German philosopher Immanuel Kant …………. exactly the same things at the same time every day, so that people …………. their watches by his actions.

4. The author Agatha Christie ……………… her second husband with his archaeological excavations.

5. The novelist James Joyce …………….. English in the Italian city of Trieste, and some people say that he ………….. his students the wrong meanings of words as a joke.

6. The novelist Marcel Proust …………… in a special soundproof room.

7. The ancient Greek philosophers ……………… their classes outside in the open air.

8. The Russian novelist Vladimir Nabokov ………….. his free time studying and catching moths and butterflies.

7. Complete the sentence with *used* to + the verb in brackets in positive, negative or question form.

1. What things (be) ……………… different in the past?

2. For a start, alI the continents (form) .. ………... one large land mass.

3. Obviously, there (be) ………….. cities and buildings, and forest covered a third of the Earth.

4. The climate was different, and animals such as the hippopotamus and rhinoceros (exist) ………. ……in northern Europe.

5. Many mountains in Europe (be) …………… active volcanoes.

6. Early people (live) ……………… in complex societies, but in small groups in places where they could find food.

7. What (eat) .. …………. ? They (eat) …………… whatever they could find.

8. Early people (stay) .... in the same place, but (travel) …………
long

distances, following the animals they needed for food.

Питання для самоперевірки

1. What is memory?

2. Why memory management is important?

3. What is the difference in base and limit registers?

Література: [2, с. 165 – 200; 3, с. 143 – 215].

Тема 4. I/O Devices. Device Management. PastSimple and Present Perfect.

Методичні поради

1. Read these sentences about fish. Then put the verb in brackets into present perfect simple form.

2. About 15% of protein eaten by humans (always come) ………….. from fish.

3. Recently, however, the number of fish (fall) ……….. .

4. Several things (cause) …………….. this problem.

5. Most scientists agree that governments (not do) ………… enough to stop overfishing.

6. This means that fish populations (grow) ……………. smaller.

7. Many fish (not reproduce) ………..….. fast enough to replace their numbers.

8. The population of North Sea cod, for example, (reach) …………. a dangerous level.

9. EU laws (reduce) …………… the numbers of fishing boats.

10. As a result, many fishermen in traditional fishing ports (lose) ..………. their jobs.

11. In recent years, fish in the UK (become) …………… expensive, and many people (stop) ……………. eating it.

2. Use the prompts to make a question.

1. you / ever / see a humming bird _____?

It's the world smallest bird.

2. you / ever / read *War and Peace* _____?

It's one of the longest 19th-century novels.

3. you / ever / visit San Marino _____?

It's Europe's second smallest country.

4. you / ever / swim in the Pacific Ocean _____?

It's the largest ocean in the world.

5. you / ever / take a trip to the Sahara Desert _____?

It's one of the hottest place s in the world.

3. Complete each sentence with one of the time words in the list. You will need to use some words more than once.

yet	for	already	since

1. 'Haven't you left ……….?

2. 'No. I've been here …………. 8.00 this morning.'

3. 'Have you checked the results of the experiment …………..?

4. 'Yes, I've .... done that.'

5. 'We've worked on this project ………….. three weeks. Unfortunately we haven't

6. discovered anything interesting .

7. 'No, nothing has happened …………… last Tuesday.'

8. 'Yes, I know. I've ……………… seen your report.'

9. 'So I'm going to do the experiment again. But I haven't started it …………. .

10. 'Don't bother. I've ………………. started it. I haven't checked ………….., but I think we're going to get the same results.'

4. Complete the sentence with *have been* or *have gone*.

1. Two scientists from a laboratory in Oxford ……….. to Antarctica, and will stay there for three months. They ………… there to investigate the effects of glob al warming on the polar ice. Colleagues in Oxford, who ………….. to Antarctica on earlier expeditions, will keep in touch with them by radio.

2. A team from London has arrived in China. They …………… there to join a project which is searching for the fossil remains of dinosaur eggs. 'We ……….. (not) to China before,' said team leader Mark Jones, 'though two of us ………….. to the USA where there is a similar project.'

3. A dangerous spider is missing from a private zoo in Manchester. 'Herbie is a Brazilian wandering spider, and we're not sure where he ………….., said spokesperson Anne Graham. 'He only arrived in the zoo last month, so he ……….. (not) here long. A lot of children ………….. to the zoo in the past few days, and we

are worried that someone has taken Herbie, or that he …………. out in somebody's pocket, and they don 't know about it.'

5. Read the text about climate change. Choose the correct form A or B to complete the sentence.

At the moment, scientists agree that the world's climate (a) .………… warmer over the past 50 years, but they disagree about the causes. Same believe that human activities (b) ……………… climate change. They argue that for 1,000 or 2,000 years before 1850, when records (c) ………….., the temperature was more or less stable. Short warm or cold periods (d) …………….. during that time, but the climate always e to the same level. However, since the Industrial Revolution, human beings (f) …………… more and more fossil fuels, such as coal and oil. In 1800 the atmosphere (g) …………….. around 280 parts per million of carbon dioxide (CO_2). Since then there (h) ………….. an increase of about 31%. This extra carbon dioxide (i) ………………. the world's temperature because of the greenhouse effect. Other scientists disagree that human activities over the past 50 years (j) …………. global warming. They point out that volcanoes and other natural processes (k) …………… CO_2 into the atmosphere, and that human activity (l) …………. a rise in CO_2 of only three per cent. In 1999, 156 countries (m) ………….. the Kyoto protocol, part of a United Nations agreement on climate change, which (n) …………… into force in 2005.They (o) ………………. to reduce their emissions of CO_2 and other greenhouse gases, although so far, same countries, such as the USA and Australia, (p) …………. any action.

a   A became   B has become

b   A caused   B have caused

c   A began   B have begun

d   A occurred   B have occurred

e   A returned   B has returned

f   A burned   B have burned

g   A contained   B has contained

h   A was   B has been

i A raised	B has raised
j A caused	B have caused
k A always released	B have always released
l A contributed	B has contributed
m A signed	B have signed
n A came	B has come
o A agreed	B have agreed
p A did not take	B have not taken

Питання для самоперевірки

1. Which functions of Operating System do you know?

2. What is a block device?

3. What is a character device?

4. Is there other classification of computer devices? Which one?

5. How do devices communicate with the computer?

6. What is a daisy chain?

7. What is a controller?

Література: [2, с. 210–250; 3, с. 216–250].

Тема 5. Computer Network Concept and Architecture. Past Simple and Past Perfect.

Методичні поради

1. Complete the sentence with the past simple or past perfect simple form of the verb in brackets.

1. When I (try) .... to use my laptop, I realized the battery (run) .... down.

2. I (tum) ……….. the computer off, but forgot that I (not save) ……… my work.

3. I only remembered I (not pay) ……… the bill when my Internet connection (stop) ……….. working.

4. When I (receive) ……….. the e-mail, I couldn't understand who (send)……. it.

5. When I (check) .... the instructions, I understood what I (do) ……….. .

6. I knew I (receive) ………... a virus when I (run) ………. the anti-virus program.

7. As soon as I (download) …………. the document, I knew I (make) ……… a mistake.

8. I could see what (go) ……….. wrong as soon as I (look) …….. inside the printer.

9. I knew I (press) …………. the wrong key when nothing (happen) …………...

10. When the screen (go)…………... blank, I couldn't understand how it (happen) ……… .

2. Read these sentences about Julius Caesar. Then complete the sentence with the past simple or past perfect form of the verb in brackets.

Julius Caesar (come) …………… from an aristocratic Roman family, though his family was not rich by Roman standards. When he was 15 his father (die) …………..., and to avoid political problems in Rome, Caesar (serve) ………….. as a soldier in the east. By the time he (return) ………… to Rome, he (win) ………….. awards for bravery. He (become) ………...... a member of the Senate, and governor of what is now Spain. By the age of 40 he (rise) …………... to the top of the political world, and (form) …………...... a political alliance with a powerful general, Pompey, and a rich man, Crassus. Between 58 BC and 49 BC he (fight) ………. a war against the people of what are now France, Belgium, Switzerland and parts of Germany. By the end of this war, according to the historian Plutarch, three million men (die) …………. In 50 BC the Senate (order) …………. Caesar to return to Rome. By that time, Crassus was dead and Pompey (become) ………... Caesar's enemy. In the civil war that followed, Caesar (defeat) ………….. all his enemies. By the time a group of Roman senators (murder) …………… him in 44 BC, he (be) ……….. the most powerful man in Rome for only a year.

Read the story of Archimedes and his bath. Then complete the text with the correct form of the verb in brackets.

Archimedes, the Greek mathematician, is probably most famous for the story of King Hieron II of Syracuse and the gold crown. The king (want) ………...... to give a gold crown as a gift to the gods, and (give) .... a carefully weighed amount of gold to a goldsmith. The man (produce) …………. a beautiful crown, but the king. was worried that the craftsman (not use) ....all the gold to make the crown. Dishonest craftsmen often (mix) ………… gold with silver, which was cheaper, but the king could not find a way of proving that the man f (do) …………… this. He (ask) ………….. Archimedes to solve the problem. Archimedes (know) …………….. that gold and silver have different densities. The problem was that nobody could calculate the mass of an object like a crown. While Archimedes (think) ………………… about this problem, he decided to go to the public baths to relax. While he (climb) ……………. into the bath, he (notice) ……………… some water on the floor. It (spill) ………………. over the side of the bath, and he (realize) …………… that he (solve) ………….. the problem by accident. The total amount of water that (spill) ………… out of the bath must be the same as the volume of his body. He could use a piece of pure gold and calculate its volume, and then test the crown and see if it was the same. According to the story, he (jump) ………… straight out of the bath and (run) ………….. down the street calling 'Eureka - I've found it.' The goldsmith soon (admit) ………….. that he (cheat) …………. the king, and was punished. Archimedes (discover) ………………. a principle of buoyancy.

<div align="center">

Питання для самоперевірки

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1. What is a communication system?

2. Which kinds of cable do exist?

3. What is multiplexing?

4. What is modulation?

5. Which types of modulation do you know?

Література: [1, с. 35–90; 2, с. 270–290].

Тема 6. Computer Network Types. Present Perfect Progressive and Past Perfect Progressive

Методичні поради

1. Complete the sentence using the verb in brackets in the present perfect continuous form.

2. I'm sory to keep you waiting. I hope you (not wait) …………..…….. long.

3. There you are! We (look for) ……………………. you all morning!

4. I feel really tired. I (study) …………………. hard lately.

5. Anna has got a really good suntan. She (go) ………………….. to the beach a lot.

6. Tom needs cheering up. He (have) …………………………… a lot of problems lately.

7. I haven't seen you for ages. What (you / do) ……………………………?

8. I (work) …………………………. here for the past three years, and I really like it.

9. Sam and Chris (paint) ………………………………… their room, and their clothes are covered in paint!

2. Underline the correct form.

1. Scientists *have recently identified / have been identifying* a new species of

animal in the rainforest of Borneo. They *have been searching / searched* for this

creature for several years, after reports from local villagers, and say it is a type

of lemur.

2. Archaeologists in Guatemala *have found / have been finding* a Mayan wall painting which they think is more than 2,000 years old. Archaeologist William Saturno *explored / has been exploring* the site since 2002.

3. Scientists using the Hubble Space Telescope think they *found /have found* two new moons circling the planet Pluto. Astronomers *have been looking / looked* closely at Pluto since 1978 when they *spotted / have spotted* its first moon. The

telescope *worked / has been working* for fifteen years, and *has been producing / has produced* more than 700,000 images of the universe.

4. Australian scientists *have been discovering / have discovered* a new coral reef over 60 km long in the Gulf of Carpentaria by using satellites to spot the reefs in deep water. Recently divers *have managed / have been managing* to reach the reefs and take photographs.

3. Complete the text with the past simple, past continuous or past perfect simple form of the verbs in brackets.

Mozart was born in 1756, the son of a professional musician. His father soon (give up) …………………. composing when he recognized his son's musical talent. By the age of three, the young Mozart (learn) .... to play several pieces of music. While he and his father (travel) ……………… round Europe, Mozart met many famous musicians and composers. Before he was 17, he (compose) ……………. several operas. While he (visit) ……………. the Vatican in Rome, he (listen) .... to a piece of music which, up to this point, the Vatican authorities (keep) .... secret. No one (publish) ………….. a copy of the piece before, but Mozart (manage) …………….. to write it down from memory after he (listen) …………… to it once.

By the age of 30 he (become) …………….. one of the most famous composers in Europe, and I (have) ………………. a large apartment in Vienna, which is now a tourist attraction. It was here that he (write) ………… his famous opera *The Marriage of Figaro.* In 1791, while he (work) ……………. on his *Requiem,* he (fall) …………….. ill and died at the age of 35.

4. Supply the present perfect progressive or the past perfect progressive tenses. Show where both are possible.

1. I was tired. I .... all day. (dig)

2. We .... for your call all evening. (wait)

3. How long .... there? (you wait)

4. I .... there since 6 o'clock. (stand)

5. She.. English for five years before she visited Canada. (study)

6. It started raining last Monday and it .... ever since. (rain)

7. I .... to the firm regularly for a month before, but they still hadn't answered. (write)

8. They .... me about it every day for the past week. (ring)

9. I knew you .... - How did you know? - Your hair was covered with paint! (paint)

10. You were out of breath when you came in this morning. ....? (you run)

5. Put in the past perfect simple or progressive or the simple past. Give alternatives where possible.

COOKING THE BOOKS?

Old Mr Williams was very concerned. He and his wife were pensioners and he (spend) …….…..… the whole morning looking for their pension books. He (look) .... everywhere, but he (not be able) .... to find them.

Meanwhile, his wife (be) .... busy. She (cook) .... all morning. She (prepare) .... a delicious meal. She (make) .... soup, followed by a lovely pie, which she (bake) .... in the oven. Mr Williams (always enjoy) .... his food, but he clearly wasn't enjoying his lunch. 'What's the matter, Tom?' his wife asked. Mr Williams (have to) .... confess that he (lost) .... their pension books. 'I know,' Mrs Williams (say) .... with a twinkle in her eye. 'I've got them'. 'You've got them?' 'Yes - and guess where I (find) .... them!' Mr Williams suddenly remembered. 'In the oven! I (put) .... them there for safe-keeping.' He (smile) .... with relief as she (fish)........................ them out of her apron pocket!

Питання для самоперевірки

1. What was the beginning of Internet?

2. What is virtual service?

3. What is datagram service?

4. Which issues are there in computer network?

Література: [1, с. 92–167; 2, с. 291–330].

Тема7. Computer Networks Topologies and Components. Questions

Методичні поради

1. In the following situations choose the correct sentence, a) or b).

1. You are reminding a colleague about the programme for tomorrow.

   a Remember that you'll meet the supplier at 12 o'clock.

   b Remember that you're meeting the supplier at 12 o'clock.

2. Two colleagues are discussing the future visit by inspectors.

   a The inspectors won't allow us to store chemicals in this cupboard.

   b The inspectors are not allowing us to store chemicals in this cupboard.

3. Designers are discussing the car models with airbags.

   a The use of airbags is going to save more lives in the future.

   b The use of airbags is saving more lives in the future.

4. Two managers need the results from some research before November.

   a They won't be able to complete the research before November.

   b They aren't completing the research before November.

5. A senior manager isn't looking forward to next week because he's worried about the tests.

   a Tests will be carried out next week.

   b Tests are being carried out next week.

2. Supply will + verb or will be + -ing. Where both are possible, see if you can 'feel' the different effect of the simple future compared with the progressive.

1. Sit down and fasten your seat belt. We ………... in a few minutes. (take off)

2. When .... to the bank to draw some money? (you go)

3. Do you think you .... here in five years' time? (still work)

4. They .... from Dover, not Folkestone. (sail)

5. The President .... the Prime Minister before flying back home. (meet)

27

6. So you're stopping off in Dubai on your way to Beijing. How long .... there? (you stay)

7. We .... to London next Monday morning. (drive)

8. By this time next year, I .... my memoirs. (write)

9. In five years' time a permanent space station .... the moon. (circle)

10. I don't think I .... him tonight. (see)

3. Supply will + verb or will be + -ing - whichever 'feels' appropriate in this dialogue.

Situation: Susan and her family will be setting out on holiday tomorrow morning.

MEG: So you're off on holiday tomorrow. How exciting! What time (you leave) ………………?

SUE: We (leave) ………............... the house at about 6 a. m.

MEG: 6 a.m.! Why so early? You don't have to check in till 9.45. You (arrive) .... at the airport terribly early!

SUE: I know, but the airport is very busy at this time of the year and we want to avoid the rush. We (check in) .... as quickly as we can, then we (have) .... breakfast at the cafeteria.

MEG: I'm sure that's wise of you. Imagine! By this time tomorrow evening you (lie) .... on the beach and I (do) .... the ironing or something!

SUE: I hope you're riqht! I hope we (not sit around) .... at the airport. You never know these days!

4. Supply the future perfect simple or progressive. Note where both are possible.

1. They .... the new bridge by the end of the year. (complete)

2. By the end of this week, I .... seventeen weeks for my phone to be repaired. (wait)

3. Do you realize that on August 15, we .... in this house for fifty years? (live)

4. I hope I .... this report by the end of the day. (finish)

5. She .... for work before the children get home from school. (leave)

6. We .... non-stop for fourteen hours before we get to Calcutta. (fiy)

7. They .... work on the great dam by the end of this decade. (complete)

8. Radio waves from earth .... for light years before anyone picks them up. (travel)

5. Put in the simple future, the future progressive or the future perfect simple.

FLYING JUNK

By the middle of the 21st century we (build) I .... space stations which (circle) .... the earth and (probably circle)........................... the moon, too. We (establish) .... bases on planets like Mars. At present, we use radar to 'watch' nearly 8,000 objects in space. In addition, there are at least 30,000 bits of rubbish from the size of marbles to the size of basket balls flying round the earth. These (increase) .... in number by the year 2050 and (orbit) .... the earth. All these bits and pieces are watched by NORAD (North American Radar Defence Command). NORAD (have) .... more and more rubbish to watch as the years go by. Some bits fall back to earth, like the Russian satellite C954, which crashed in the Northern Territories of Canada in 1978. Crashing junk could give us a bad headache. Most of the stuff (stay) .... up there (we hope)! The sad fact is that we who are alive today (not clear up) .... our own junk tomorrow. Perhaps we (just watch) .... from some other (safa) place as it goes round and round the earth!

6. Supply *be going to* or 'll in this dialogue.

Situation: Mr Sims is driving. His wife is sitting beside him.

HE: Where *(we spend)* I .... the night?

SHE: Cardiff. I've booked us in at the Angel Hotel. Why do you ask?

HE: That's another thirty miles away. We *(run)* .... out of petrol before we get there. I *(stop)* .... at the next filling-station.

Half an hour later.

SHE: This road goes on forever.

HE: We *(get)* .... stuck. The car's stopping. We *(have to)*.............. walk.

SHE: Come on then. Perhaps someone *(give)* .... us a lift.

HE: Not a filling-station in sight and look at those black clouds. It *(rain)* ....

SHE: Look! A car's coming. I *(wave)* .... to the driver.

HE: Oh good!. He's slowing down. He *(stop)* ....

Питання для самоперевірки

1. Which LAN topologies do you know?

2. What is WLAN?

3. What is WiFi?

4. What is Wide Area Network?

5. Which issues are there in Internetworking?

6. What is Internet?

Література: [1, с. 200–254; 2, с. 331–355].

3 ПИТАННЯ ДО МОДУЛЬНОГО КОНТРОЛЮ

1. What difference is there between applications software and operating systems?

2. Why is the supervisor program the most important operating system program?

3. What is the difference between resident and non-resident programs?

4. What are the main functions of an operating system?

5. What is a process?

6. What is a program?

7. What are differencies between a process and program?

8. What is memory?

9. Why memory management is important?

10. What is the difference in base and limit registers?

11. Which functions of Operating System do you know?

12. What is a block device?

13. What is a character device?

14. Is there other classification of computer devices? Which one?

15. How do devices communicate with the computer?

16. What is a daisy chain?

17. What is a controller?

18. What is a communication system?

19. Which kinds of cable do exist?

20. What is multiplexing?

21. What is modulation?

22. Which types of modulation do you know?

23. What was the beginning of Internet?

24. What is virtual service?

25. What is datagram service?

26. Which issues are there in computer network?

27. Which LAN topologies do you know?

28. What is WLAN?

29. What is WiFi?

30. What is Wide Area Network?

31. Which issues are there in Internetworking?

32. What is Internet?

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